

CLAIMS

What is claimed is:

1. A computer system including a main system having an audio signal generating unit generating audio signals, a main audio outputting unit in communication with the main system and outputting the generated audio signals, an auxiliary system connected to the main system and receiving the generated audio signals, and an auxiliary audio outputting unit in communication with the auxiliary system and outputting the generated audio signals received in the auxiliary system, the computer system comprising:

a first filter provided in the main system, filtering the audio signals generated in the audio signal generating unit and supplying only a first frequency band as designated to the main audio outputting unit;

a second filter provided in the auxiliary system, filtering the audio signals generated in the audio signal generating unit and supplying a second frequency band different from the first frequency band to the auxiliary audio outputting unit;

a third filter provided in either of the main system or the auxiliary system, filtering the audio signals generated from the audio signal generating unit and supplying a third frequency band different from the first and the second frequency bands to either of the main audio outputting unit or the auxiliary audio outputting unit; and

a switching unit switching the audio signals to selectively pass through either the first filter or the third filter and be supplied to the main audio outputting unit, and to selectively pass through either the second filter or the third filter and be supplied to the auxiliary audio outputting unit, depending upon whether the auxiliary system is connected to the main system.

2. The computer system according to claim 1, wherein the first filter is a band pass filter (BPF), the second filter is a low pass filter (LPF) and the third filter is a high pass filter (HPF).

3. The computer system according to claim 1, wherein the switching unit comprises:
a switch performing the switching;
a sensing unit sensing whether the auxiliary system is connected to the main system;
and

a controller controlling the switch so that the third filter is connected to either the main audio outputting unit or the auxiliary audio outputting unit, depending upon whether the auxiliary system is connected to the main system according to the sensing unit.

4. The computer system according to claim 3, wherein the controller controls the switch so that the third filter is connected to either the main audio outputting unit or the auxiliary audio outputting unit, depending upon whether an audio signal frequency band selection is input in a state indicating that the auxiliary system is connected to the main system according to the sensing unit.

5. The computer according to claim 4, wherein the controller is a logic element locally operating in response to a connection sensing signal by the sensing unit and the input audio signal frequency band selection.

6. The computer system according to claim 4, wherein the audio signal frequency band selection is input via at least one of keyboard hot keys, a CMOS setup, and selection buttons.

7. The computer system according to claim 2, wherein the switching unit comprises:
a switch performing the switching;
a sensing unit sensing whether the auxiliary system is connected to the main system;
and

a controller controlling the switch so that the third filter is connected to either the main audio outputting unit or the auxiliary audio outputting unit, depending upon whether the auxiliary system is connected to the main system according to the sensing unit.

8. The computer system according to claim 7, wherein the controller controls the switch so that the third filter is connected to either the main audio outputting unit or the auxiliary audio outputting unit, depending upon whether an audio signal frequency band selection is input in a state indicating that the auxiliary system is connected to the main system according to the sensing unit.

9. The computer according to claim 8, wherein the controller is a logic element locally operating in response to a connection sensing signal by the sensing unit and the input audio signal frequency band selection.

10. The computer system according to claim 8, wherein the audio signal frequency band selection is input via at least one of keyboard hot keys, a CMOS setup, and selection buttons.

11. A computer system including a main system having an audio signal generating unit generating audio signals, a main audio outputting unit in communication with the main system and outputting the generated audio signals, an auxiliary system connected to the main system and receiving the generated audio signals, and an auxiliary audio outputting unit in communication with the auxiliary system and outputting the generated audio signals received in the auxiliary system, the computer system comprising:

- a first filter provided in the main system, filtering the audio signals generated in the audio signal generating unit and supplying only a first frequency band as designated to the main audio outputting unit;

- a second filter provided in the auxiliary system, filtering the audio signals generated in the audio signal generating unit and supplying a second frequency band different from the first frequency band to the auxiliary audio outputting unit;

- a third filter provided in the main system, filtering the audio signals generated from the audio signal generating unit and supplying a third frequency band different from the first and the second frequency bands to the main audio outputting unit; and

- a switching unit switching the audio signals to selectively pass through either the first filter or the third filter and be supplied to the main audio outputting unit, depending upon whether the auxiliary system is connected to the main system.

12. The computer system according to claim 11, wherein the first filter is a band pass filter (BPF), the second filter is a low pass filter (LPF) and the third filter is a high pass filter (HPF).

13. The computer system according to claim 11, wherein the switching unit comprises:

a switch performing the switching;

a sensing unit sensing whether the auxiliary system is connected to the main system;

and

a controller controlling the switch so that the third filter is connected to the main audio outputting unit, if determined that the auxiliary system is connected to the main system according to the sensing unit.

14. The computer system according to claim 13, wherein the controller controls the switch so that the third filter is connected to the main audio outputting unit, depending upon whether an audio signal frequency band selection is input in a state indicating that the auxiliary system is connected to the main system according to the sensing unit.

15. The computer according to claim 14, wherein the controller is a logic element locally operating in response to a connection sensing signal by the sensing unit and the input audio signal frequency band selection.

16. The computer system according to claim 14, wherein the audio signal frequency band selection is input via at least one of keyboard hot keys, a CMOS setup, and selection buttons.

17. The computer system according to claim 12, wherein the switching unit comprises:

a switch performing the switching;

a sensing unit sensing whether the auxiliary system is connected to the main system;

and

a controller controlling the switch so that the third filter is connected to the main audio outputting unit, if determined that the auxiliary system is connected to the main system according to the sensing unit.

18. The computer system according to claim 17, wherein the controller controls the switch so that the third filter is connected to the main audio outputting unit, depending upon whether an audio signal frequency band selection is input in a state indicating that the auxiliary system is connected to the main system according to the sensing unit.

19. The computer according to claim 18, wherein the controller is a logic element locally operating in response to a connection sensing signal by the sensing unit and the input audio signal frequency band selection.

20. The computer system according to claim 18, wherein the audio signal frequency band selection is input via at least one of keyboard hot keys, a CMOS setup, and selection buttons.

21. The computer system of claim 4, wherein the controller is a programmed processor controlling the switch in response to a connection sensing signal by the sensing unit and the input audio signal frequency band.

22. The computer system of claim 14, wherein the controller is a programmed processor controlling the switch in response to a connection sensing signal by the sensing unit and the input audio signal frequency band.

23. A computer system, comprising:
a main audio system processing sound;
an auxiliary audio system processing sound when in communication with the main audio system;
a plurality of selectable filters in the main and the auxiliary audio systems and filtering generated audio signals within respective frequency bands; and
a switch controlling the audio signals to pass through the filters to supply the selected filtered audio signals to the main audio system and/or to the auxiliary audio system, depending upon whether the auxiliary audio system is communicating with the main audio system.

24. The computer system of claim 23, wherein the filters comprise a band pass filter (BPF), a low pass filter (LPF) in the auxiliary system, and a high pass filter (HPF), and wherein the BPF and the HPF are provided interchangeably in the main audio and/or the auxiliary audio systems and the switch controls the audio signals to pass through the LPF and the HPF depending upon whether the auxiliary audio system is communicating with the main audio system.

25. The computer system of claim 23, wherein the auxiliary audio system is provided in a docking station for the computer system.

26. An audio signal frequency band switch in a computer having a main audio system and an auxiliary audio system, the switch comprising:
a sensor sensing whether the auxiliary audio system is communicating with the main audio system;
a plurality of filters in the main and the auxiliary audio systems and filtering generated audio signals within respective frequency bands; and
a controller controlling input to the filters in response to the sensor and input filter selection to control sound output according to the filter selection at the main and auxiliary audio systems.